#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT CO RATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



# 

(43) International Publication Date 3 June 2004 (03.06.2004)

**PCT** 

(10) International Publication Number WO 2004/046085 A1

(51) International Patent Classification<sup>7</sup>: 229/28

C07C 227/42,

(21) International Application Number:

PCT/IN2002/000224

(22) International Filing Date:

20 November 2002 (20.11.2002)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): HIKAL LTD. [IN/IN]; 6, Nawab Building, 327, Dr. D N Road, Fort, 400001 Mumbai (IN).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KUPPUSWAMY, Nagarajan [IN/IN]; Hikal R & D centre, 32/1, Kalena Agrahara, Bannerghatta Road, 560076 Bangalore (IN). HARIHARAN, Sivaramakrishnan [IN/IN]; Hikal R & D centre, 32/1, Kalena Agrahara, Bannerghatta Road, 560076 Bangalore (IN). MARIADAS, Arulselvan [IN/IN]; Hikal R & D centre, 32/1, Kalena Agrahara, Bannerghatta Road, 560076 Bangalore (IN).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### **Declaration under Rule 4.17:**

of inventorship (Rule 4.17(iv)) for US only

### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR THE PREPARATION OF AMINO METHYL CYCLO ALKANE ACETIC ACIDS

(57) Abstract: This invention relates to an improved process for the preparation of amino methyl cyclo alkane acetic acids. This invention particularly relates to an improved process for the preparation of gabapentin (which is chemically known as 1-aminomethyl-1cyclohexaneacetic acid), which is a very well known agent useful for the treatment of epilepsy and other cerebral disorders. In the chemical series of 1-amino methyl cyclo alkane-1-acetic acids, Gabapentin, which is 1-amino methyl cyclo hexane -1-acetic acid has been developed as a drug having anti convulsive properties.

